Issue 6. Winter 2000/2001

GOING DIGITAL IN DEVELOPING REGIONS AND COUNTRIES

by

Nestor O. Criscio *

I assume my personal responsibility to face, multi disciplinarily, what we could call "the dark side" of wireless telecommunications, particularly digital broadcasting. I shall start by recalling four basic key aspects, underlying the developing of my conclusions:

- 1) Wireless telecommunications use "places" in the electromagnetic spectrum.
- 2) Broadcasting is the base and vehicle for the free circulation of ideas and Freedom of Expression, is the base of Democracy.
- 3) The changes in transmission techniques, imply big economic investments for people and broadcasters.
- 4) Those who have to decide on behalf of the people, do not always have objective information.

It is clear, that technical development is generally beneficial for human kind. Many are the technical developments favoring men's activities, but it is also true, that each state must have the right to decide, freely and independently, when and how, to introduce those changes. Particularly, when they imply a commitment of the rights and interests, of the community.

The development of transmission numeric techniques - digital - emphasizes and worsens the ancient issue of inequity, because most of the new systems, due to their costs and complex implementation, are generally made, only for groups of great political and economic power. Economic because of installation costs... (for instance, how much money is needed to start and operate a satellite station), and political, because of the form, through which orbital sites, and radio electric frequencies and bands, are assigned in most countries.

From the above said, we may deduct those technical developments, could indirectly, jeopardize the full enforcement of mankind's great principles.

Most of Latin American Broadcasting, that is private and independent, is very concerned about the development of the facts.

^{*} Chairman of the Standing Technical Committee of the International Association of Broadcasting. Paper originally presented at the Pacific Telecommunications Concil's 23rd Annual Conference, held January 14-18. 2001. Honolulu. Hawaii.

Issue 6, Winter 2000/2001

With regard to economic, political and cultural issues, Latin American countries will face more damages than benefits, if they make a transition to digital transmission for all terrestrial broadcasting in the conditions it is established, and even worse, if it is based on satellite systems.

Concerning the main issue of my address, I shall state in detail the grounds of my theory:

- 1) The electromagnetic spectrum is a heritage of the international community. The bands and frequencies of this spectrum, that each country must administrate, are a natural resource, and a part, of the revenues generated by their operation, belong to each nation. To this effect, we must recall the International Telecommunications Convention which is the main Treaty of the International Telecommunications Union, particularly concerning to the use of the spectrum of radio electric frequencies and the orbit of geo stationary satellites, stating that members will try to limit the frequencies and the spectrum used to the minimum essential, to get the satisfactory operation of the necessary services. To this aim, they will strive to apply, the latest technical advances as soon as possible. The Convention also states that, in using frequency bands for radio communications, members will bear in mind, that frequencies and the orbit of geo stationary satellites, are limited natural resources, that must be used reasonably, effectively and economically, as provided in radio communications rules. This, to allow the different countries or groups of countries, the equitable access to this orbit and to those frequencies, take account the special needs of developing countries, and the geographic situation of determined countries.
- 2) The principles stated in the Convention, not always are taken into account by the ITU which, being responsible for the procedures, of co-ordination of the radio electric spectrum bands, and the orbital positions of satellite stations, has shown its partial lack of ability, to handle new transmission techniques. Mainly those, using some kind of satellite systems, because in many cases, when they start their services, the rights of the peoples as well as freedom and independence, have not been taken into account. Mostly the right of each country, to administrate their bands in the electromagnetic spectrum.
- 3) Changes to be made in broadcasting, should have to be guided for the benefit of majorities, and not as it is happening now,under the pressure of a powerful and too much small minority.
- 4) Small and/or underdeveloped countries will be the most damaged, if changes oblige their citizens to buy new sets (for instance receivers) created and manufactured by countries or groups of countries, who promote the technological change, without considering that this change also obliges expenditure, making the former more dependent on the latter.
- 5) People's needs are different, then, it seems difficult that techniques created for certain countries, can be adapted to any other one, and, that the moment of the change, may be same for one country, or another.
- 6) The International legislation that rules the radio electric area, does not accompany the evolution of techniques, creating legal gaps, that allow the operation of systems in opposition to majorities' interests, and even worse: In creating the rules "to fill those gaps of in-

Issue 6, Winter 2000/2001

ternational legislation", developing countries do not have a meaningful participation in the forums, where those rules are established.

As I said before, new broadcasting techniques are closely linked with the economy. These issues present several aspects. Let's start with direct satellite broadcasting systems to the listener/viewer. Let's consider the case, when signals reach the user directly with foreign programming content. In a country reached by signals, if the broadcast is open and has advertising agreed abroad, the economic aspects of it will affect two victims, the state and local broadcasters It is evident, the capacity of the advertising market is finite and will have to be shared with these new operators. This victimizes local broadcasters.

If the signals sent from the satellite are carriers, and their operators "sell" the service of "transparent system" to local broadcasters, then, because they use part of the radio electric spectrum, each state must administrate and they should be ruled, by local standards. But, even paying the corresponding taxes and acting under local standards, most independent broadcasters would be affected, if they could not have access to satellite systems because of their high costs, being an indirect way to discriminate, who has the right to keep in the air, and who does not.

In terrestrial sound broadcasting, among the numeric transmission systems that are dominating the possible change, we point out the IBOC and EUREKA 147. IBOC still being developed, would be more suitable to the reality of most countries in America. This system is different from EUREKA, mainly because it keeps broadcasters' independence and offers the public a more convenient transition, besides IBOC system, though inferior for the moment, is economically more convenient for America, particularly Latin America, due to its low operation costs.

Even worse is the case of terrestrial television, because today, there is any system available, that yield work together at same channel the new numeric transmission with the analog one. This situation, would force the broadcasters to buy new transmitters, and new receivers to public .

In all the cases, if wrong ways are chosen, the economic impairment would weaken small and medium broadcasters, or would lessen their independence.

I think this issue is serious and concerning, if as a result of these changes the exercise of Freedom of Expression is reduced to a small group of persons, with the necessary economical and political power to have access to new transmission systems. Here, the discussion is not whether many of the new systems of broadcasting, in the technical aspect, are excellent, I am sure they are, but again I am analyzing the consequences, their introduction might cause to the people.

Then, as a summary of my address, I point out the following:

The transition to digital in broadcasting will be a huge business, difficult to imagine. Thousand of millions of receivers, hundreds of thousand transmitters and great quantity of other equipment, besides of satellite services, would be sold from the developed countries, to the developing ones and nothing indicates they are planning to share profits.

International Journal of Communications Law and Policy

Issue 6, Winter 2000/2001

- The supposed need for a change and, above all, the moment when it should happen, have being managed, in many cases, by interests out of broadcasting.
- The possible change to numeric broadcasting in Latin America, must not modify the basic characteristics and big principles that have guided this activity from its beginning..
- Changes must respect the sovereignty of the peoples.
- The international legislation must be fit to the current state of technique, aiming at equity and justice.
- The ITU must adapt its operational system, so as to moderate the preponderance of some countries on others.

This approach is to analyze, the possible consequences that going digital might cause in certain circumstances on pluralistic, free and private broadcasting, that has been operating in our region for over 75 years, as well as the effect, those changes would have on our people, our rights, our cultures and our economies, in other words, on our independence and our Freedom.